2634

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Georgios B. Giannakis; Shengli Zhou	Confirmation No.	3586
Serial No.:	09/838,621		
Filed:	April 19, 2001	Customer No.:	28863
Examiner:	Kevin Kim		
Group Art Unit:	2634		
Docket No.:	1008-001US01		
Title:	CHIP-INTERLEAVED BLOCK-SPREAD MULTI-USER COMMUNICATION		

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop: Amendments
Commissioner for Patents
Alexandria, VA 22313-1450

Dear Sir:

Applicant submits the references listed on the attached form PTO-1449. This Supplemental Information Disclosure Statement is being filed after a first Office Action on the merits but before a Notice of Allowance or Final Rejection.
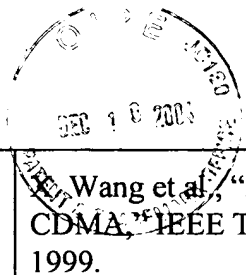
Applicant has enclosed a copy of each article cited.

Our check in the amount of $180.00 is enclosed to cover the required fee set forth in §1.17(p). Please apply any other charges or credits to Deposit Account No. 50-1778.

Respectfully submitted,

Date: December 7, 2004

Shumaker & Sieffert, P.A.
8425 Seasons Parkway, Suite 105
St. Paul, Minnesota 55125
Phone: (651) 735-1100
Fax: (651) 735-1102

By: Kent J. Sieffert
Reg. No.: 41,312

Form 1449* INFORMATION DISCLOSURE STATEMENT IN AN APPLICATION (Use several sheets if necessary)	Docket Number: 1008-001US01	Application Number: 09/838,621
	Applicant: Georgios B. Giannakis; Shengli Zhou	
	Filing Date: April 19, 2001	Group Art Unit: 2634
	Examiner Name: Kevin Kim	

OTHER DOCUMENTS (Including Authors, Title of Item, Page(s), Vol/Issue No., Publisher, Place of Publication)

	3GPP Technical Report, 3G TR 25.943, "3rd Generation Partnership Project: Technical Specification Group (TSG) RAN WG4; Deployment Aspects," 14 pgs, 1999.
	A. Klein, "Data Detection Algorithms Specially Designed for the Downlink of CDMA Mobile Radio Systems," 1997 IEEE 47th Vehicular Technology Conference, Phoenix, AZ, pp. 203-207, May 1997.
	A. Klein et al., "Zero Forcing and Minimum Mean-Square-Error Equalization for Multiuser Detection in Code-Division Multiple-Access Channels," IEEE Transactions on Vehicular Technology, Vol. 45, No. 2, pp. 276-287, May 1996.
	A. Stamoulis et al., "Block FIR Decision-Feedback Equalizers for Filterbank Precoded Transmissions with Blind Channel Estimation Capabilities," IEEE Transactions on Communications, Vol. 49, No. 1, pp. 69-83, January 2001.
	H.V. Poor et al., "Probability of Error in MMSE Multiuser Detection," IEEE Transactions on Information Theory, Vol. 43, no. 3, pp. 858-871, May 1997.
	I. Ghauri et al., "Linear Receivers for the DS-CDMA Downlink Exploiting Orthogonality of Spreading Sequences," Procedures of Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, Vol. 1, pp. 650-654, November 1998.
	K. Hooli et al, "Multiple Access Interference Suppression With Linear Chip Equalizers in WCDMA Downlink Receivers," Global Telecommunications Conference, Rio do Janeiro, Brazil, Vol. 1 of 5, pp. 467-471, December 1999.
	L. Mailaender, "Low-Complexity Implementation of CDMA Downlink Equalization," 3G Mobile Communication Technologies, pp. 396-400, March 2001.
	M. Haardt et al., "The TD-CDMA Based UTRA TDD Mode," IEEE Journal on Selected Areas in Communications, Vol. 18, No. 8, pp. 1375-1385, August 2000.
	R.G. Vaughan, "Polarization Diversity in Mobile Communications," IEEE Transactions On Vehicular Technologies, Vol. 39, No. 3, pp. 177-186, August 1990.
	T.P. Krauss et al., "Simple MMSE Equalizers for CDMA Downlink to Restore Chip Sequence: Comparison to Zero-Forcing and RAKE," 2000 IEEE International Conference on Acoustics, Speech, and Signal Processing, Volume V of VI, Istanbul, Turkey, pp. 2865-2868, June 2000.

	Wang et al./ "Iterative (Turbo) Soft Interference Cancellation and Decoding for Coded CDMA," IEEE Transactions on Communications, Vol. 47, No. 7, pp. 1046-1061, July 1999.
EXAMINER	**Date Considered**

*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-FB-A820   Patent and Trademark Office, U.S. Department of Commerce
(Also form PTO-1449)